APPENDIX A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Kiselev *et al.*
Serial No. 10/573,478
Filed : February 15, 2007
For: *Methods, Kits and Compositions for the Development and Use of Monoclonal Antibodies Specific to Antigens Traditionally of Low Immunogenicity*

Examiner: Canella, Karen A
Group Art Unit: 1643

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DECLARATION OF PETR SVESHNIKOV UNDER 37 C.F.R. §1.132

I, Petr Sveshnikov, declare:

1. I am a co-inventor of the subject matter described and claimed in the above-captioned patent application.

2. I have reviewed the Office Action mailed on June 22, 2009 issued in the above-mentioned application. In this Office Action, claims were rejected in various combinations of references that included Lussow et al., *European Journal of Immunology*, Vol. 21, pp. 2297-2302 (1991) ("Lussow"). I have reviewed the Lussow reference and provide my comments on Lussow below.

3. The Lussow reference is devoted to the study of the immunogenicity of a peptide antigen, namely the $(NANP)_{40}$ peptide. See paragraph 2.2 on p. 2298 of Lussow. This peptide was chemically conjugated with Py1 peptide, PPD, Hsp65, Hsp70 or ml18 using glutaraldehyde. See paragraph 2.2 on p. 2298 of Lussow. The main goal of the authors was to demonstrate that a strong antibody response to the $(NANP)_{40}$ peptide antigen can be generated in mice by means of adjuvant-free immunization with the above-mentioned conjugates. In this regard, the data in Lussow demonstrated that priming with *live* BCG was necessary to induce an anti-peptide antibody response in the absence of adjuvants in mice that were genetically nonresponders to (NANP) peptides. See paragraph 3.1 on p. 2298-9 of Lussow. Lussow further discovered an anti-peptide antibody response was <u>never</u> detectable in two groups of mice receiving killed BCG. See paragraph 3.1 on p. 2298-9 of Lussow.

4. Lussow's discovery is significant for the development of adjuvant-free vaccines. As described in Lussow, "antibody production took place with the hsp-peptide conjugate given in

the *absence* of adjuvants, and required a previous priming with *live* BCG." See Discussion at p. 2300 of Lussow. There is no mention in Lussow of producing monoclonal antibodies. Priming with live BCG (not heat-inactivated or lysates of BCG) is an integral requirement of all immunization schemes described in Lussow. In particular, paragraph 3.4 on p. 2299-2300 of Lussow which the Examiner points to on p. 8 of the Office Action, describes experiments conducted in mice previously primed with live BCG. See also the figure legend of Figure 5. As such, a person of skill in the art who is reading Lussow would not be motivated to omit the priming of mice using live BCG from immunization of an animal since priming with live BCG is critical to Lussow's immunization schemes.

6. All statements made herein of my knowledge are true and all statements made on information and belief are believed to be true; and further these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Date: April 20, 2010

Petr Sveshnikov